

In the Claims

Please cancel Claims 1-35.

Please add new Claims 36-86.

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36. (New) A composition comprising a portion of a heat shock protein (hsp), wherein: the portion of the hsp is joined to a heterologous protein; the portion of the hsp is limited to SEQ ID NO:8 or a homolog thereof; and the composition, when administered to an animal in a physiologically acceptable formulation, elicits a CD8⁺ cytotoxic T lymphocyte (CTL) response that is greater than the response elicited by administration of the heterologous protein alone
37. (New) The composition of claim 36, wherein the portion of the hsp, or the homolog thereof, is joined to the heterologous protein by a covalent bond.
38. (New) The composition of claim 37, wherein the covalent bond is a peptide bond.
39. (New) The composition of claim 36, wherein the homolog is a sequence from a *Mycobacterium bovis*, *Mycobacterium leprae*, or *Mycobacterium smegmatis* hsp that is homologous to SEQ ID NO:8.
40. (New) The composition of claim 36, wherein the homolog is a sequence from a mammalian hsp that is homologous to SEQ ID NO:8.
41. (New) The composition of claim 40, wherein the mammalian hsp is a murine, canine, porcine or equine hsp.
42. (New) The composition of claim 40, wherein the mammalian hsp is a human hsp.
43. (New) The composition of claim 36, wherein the homolog is a sequence from a fungal, parasitic, or bacterial hsp that is homologous to SEQ ID NO:8.

44. (New) The composition of claim 36, wherein the heterologous protein is a viral antigen.
45. (New) The composition of claim 44, wherein the viral antigen is an antigen of an influenza virus, a human papilloma virus (HPV), a herpes virus, or a human immunodeficiency virus (HIV).
46. (New) The composition of claim 45, wherein the HIV antigen is p24 or gp41, the influenza virus antigen is nucleoprotein, or the HPV antigen is E7.
47. (New) The composition of claim 36, wherein the heterologous protein is glycosylated.
48. (New) The composition of claim 36, wherein the heterologous protein is a toxin.
49. (New) The composition of claim 36, wherein the heterologous protein is an antigen of a bacterial cell or a mycobacterial cell.
50. (New) The composition of claim 36, wherein the composition is formulated as a physiologically acceptable composition.
51. (New) The composition of claim 50, further comprising an adjuvant, a pharmaceutically acceptable surfactant, an excipient, a carrier, or a diluent.
52. (New) The composition of claim 50, wherein the fusion protein is associated with a liposome.
53. (New) A composition comprising a fusion protein consisting of a portion of a heat shock protein (hsp) and a heterologous protein, wherein the portion of the hsp is limited to SEQ ID NO:8 or a homolog thereof and the composition, when administered to an animal in a physiologically acceptable formulation, elicits a CD8⁺ cytotoxic T lymphocyte (CTL)

response that is greater than the response elicited by administration of the heterologous protein alone.

54. (New) The composition of claim 53, wherein the homolog is a sequence from a *Mycobacterium bovis*, *Mycobacterium leprae*, or *Mycobacterium smegmatis* hsp that is homologous to SEQ ID NO:8.
55. (New) The composition of claim 53, wherein the homolog is a sequence from a mammalian hsp that is homologous to SEQ ID NO:8.
56. (New) The composition of claim 55, wherein the mammalian hsp is a murine, canine, porcine or equine hsp.
57. (New) The composition of claim 55, wherein the mammalian hsp is a human hsp.
58. (New) The composition of claim 53, wherein the homolog is a sequence from a fungal, parasitic, or bacterial hsp that is homologous to SEQ ID NO:8.
59. (New) The composition of claim 53, wherein the heterologous protein is a viral antigen.
60. (New) The composition of claim 59, wherein the viral antigen is an antigen of an influenza virus, a human papilloma virus (HPV), a herpes virus, or a human immunodeficiency virus (HIV).
61. (New) The composition of claim 60, wherein the HIV antigen is p24 or gp41, the influenza virus antigen is nucleoprotein, or the HPV antigen is E7.
62. (New) The composition of claim 53, wherein the heterologous protein is glycosylated.
63. (New) The composition of claim 53, wherein the heterologous protein is a toxin.

64. (New) The composition of claim 53, wherein the heterologous protein is an antigen of a bacterial cell or a mycobacterial cell.
65. (New) The composition of claim 53, wherein the composition is formulated as a physiologically acceptable composition.
66. (New) The composition of claim 65, further comprising an adjuvant, a pharmaceutically acceptable surfactant, an excipient, a carrier, or a diluent.
67. (New) The composition of claim 53, wherein the fusion protein is associated with a liposome.
68. (New) A composition comprising a portion of a heat shock protein (hsp), wherein: the portion of the hsp is joined to a heterologous protein; the portion of the hsp is limited to a substitution mutant or a fragment of SEQ ID NO:8 or a substitution mutant or a fragment of a homolog thereof; and the composition, when administered to an animal in a physiologically acceptable formulation, elicits a CD8⁺ cytotoxic T lymphocyte (CTL) response that is greater than the response elicited by administration of the heterologous protein alone.
69. (New) The composition of claim 68, wherein the substitution mutant contains only conservative substitutions of amino acid residues of SEQ ID NO:8.
70. (New) The composition of claim 69, wherein 1-50% of the amino acid residues are substituted; 1-25% of the amino acid residues are substituted; 10-40% of the amino acid residues are substituted; or 10-20% of the amino acid residues are substituted.
71. (New) The composition of claim 68, wherein the portion of the hsp, or the homolog thereof, is joined to the heterologous protein by a covalent bond.

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72. (New) The composition of claim 68, wherein the covalent bond is a peptide bond.
73. (New) The composition of claim 68, wherein the homolog is a sequence from a *Mycobacterium bovis*, *Mycobacterium leprae*, or *Mycobacterium smegmatis* hsp that is homologous to SEQ ID NO:8.
74. (New) The composition of claim 68, wherein the homolog is a sequence from a mammalian hsp that is homologous to SEQ ID NO:8.
75. (New) The composition of claim 74, wherein the mammalian hsp is a murine, canine, porcine or equine hsp.
76. (New) The composition of claim 74, wherein the mammalian hsp is a human hsp.
77. (New) The composition of claim 68, wherein the homolog is a sequence from a fungal, parasitic, or bacterial hsp that is homologous to SEQ ID NO:8.
78. (New) The composition of claim 68, wherein the heterologous protein is a viral antigen.
79. (New) The composition of claim 78, wherein the viral antigen is an antigen of an influenza virus, a human papilloma virus (HPV), a herpes virus, or a human immunodeficiency virus (HIV).
80. (New) The composition of claim 79, wherein the HIV antigen is p24 or gp41, the influenza virus antigen is nucleoprotein, or the HPV antigen is E7.
81. (New) The composition of claim 68, wherein the heterologous protein is glycosylated.
82. (New) The composition of claim 68, wherein the heterologous protein is a toxin.